

WHAT IS CLAIMED IS:

- 1 1. A sheathed scalpel comprising:
2 a handle having a proximal end and a distal end;
3 a blade attached to the distal end of the handle and having a cutting edge and a
4 tip; and
5 a sheath attached to the handle and having a central passage configured to
6 receive the blade, wherein the sheath covers the blade when the blade is retracted within the
7 central passage and exposes the cutting edge of the blade but not the tip when the blade is
8 advanced within the central passage.
- 1 2. A sheathed scalpel as in claim 1, wherein the central passage has an
2 aperture.
- 3 3. A sheathed scalpel as in claim 2, wherein the cutting edge of the blade
4 is bowed and exposed through the aperture when the blade is advanced.
- 5 4. A sheathed scalpel as in claim 3, wherein the bowed cutting edge
6 extends beyond the aperture by a depth in the range from 2 mm to 5 mm when the blade is
7 fully advanced.
- 8 5. A sheathed scalpel as in claim 2, wherein the aperture is diagonal
1 relative to a longitudinal axis of the handle.
- 2 6. A sheathed scalpel as in claim 1, wherein the sheath has a structure
3 disposed thereon to mate with a structure on the handle so as to prevent further advancement
4 of the blade when the blade is advanced so that the blade tip remains covered.
- 5 7. A sheathed scalpel as in claim 1, wherein the central passage has an
6 internal edge near a distal end thereof and the handle has an edge which mates with the
7 internal edge of the sheath so as to prevent further blade advancement.
- 8 8. A sheathed scalpel as in claim 1, further comprising a detent
1 mechanism for limiting travel of the sheath relative to the blade.

- 1 9. A sheathed scalpel as in claim 8, wherein the detent mechanism
2 comprises a series of axially spaced apart ribs or grooves on the handle and a spring detent or
3 tab on the sheath.
- 1 10. A sheathed scalpel as in claim 1, further comprising ribs on an inside
2 surface of the sheath.
- 1 11. A sheathed scalpel as in claim 1, wherein the sheath is transparent or
2 translucent.
- 1 12. A sheathed scalpel as in claim 1, wherein the blade is fixed relative to
2 the handle and the sheath advances and retracts relative to both the handle and the blade.
13. A sheathed scalpel as in claim 1, wherein the sheath is fixed relative to
the handle and the blade advances relative to both the handle and the sheath.
14. A sheath for use with a scalpel having a handle, a blade attached to the
handle, and a structure on the handle, the sheath comprising:
 an elongated housing having a central passage configured to receive the blade
 and an aperture disposed to expose a cutting edge of the blade when the blade is advanced
 within the central passage, wherein the housing fully covers the blade when the blade is
 retracted within the housing;
 wherein the housing has a structure disposed thereon to mate with a structure
 on the handle so as to prevent further advancement of the blade when the blade is advanced
 so that a tip of the blade remains covered while a bowed cutting edge of the blade is exposed
 through the aperture.
- 1 15. A method for making a small incision through skin overlying an
2 intercostal space, the method comprising:
3 providing a scalpel having a sheath;
4 retracting the sheath relative to the scalpel so that a part of a scalpel blade is
5 exposed beyond the sheath; and
6 advancing the scalpel blade through skin overlying the intercostal space to
7 form the small incision, wherein a cutting depth of the scalpel blade through the overlying
8 skin is limited by the sheath.

1 16. A method as in claim 15, wherein retracting comprises exposing only a
2 bowed cutting edge of the blade so that an exposed area of the scalpel blade is reduced.

1 17. A method as in claim 15, wherein the sheath is retracted to provide a
2 cutting depth of the blade in the range from 2 mm to 5 mm.

1 18. A method as in claim 15, wherein the retracting leaves a leading tip of
2 the scalpel blade covered within the sheath.

1 19. A method as in claim 15, wherein retracting comprises engaging an
2 internal edge of the sheath with an edge of a scalpel handle.

1 20. A method as in claim 15, further comprising aligning the scalpel blade
2 with an aperture of the sheath with ribs on an inside surface of the sheath.

1 21. A method as in claim 15, further comprising extending the sheath over
2 the scalpel blade so that the scalpel blade is housed within the sheath.

1 22. A method as in claim 21, wherein extending comprises engaging a
2 spring detent or tab on the sheath with at least one outer rib or groove on a scalpel handle.

1 23. A method as in claim 21, further comprising re-retracting the sheath
2 relative to the scalpel so that the scalpel blade may be advanced at least a second time.

1 24. A method as in claim 15, further comprising advancing a blunt
2 member through the small incision and the intercostal space above the heart to establish an
3 intercostal access tract.

1 25. A method as in claim 24, further comprising advancing a direct cardiac
2 massage device through the intercostal access tract.